

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)

2. (Currently amended) A-~~The~~ system according to claim ~~1~~12, wherein the second optical surface (7) ~~is provided with~~ has deposited the hydrophobic layer (11) ~~that has with~~ a thickness substantially equal to $0.25 \lambda/n$.

3. (Currently amended) A-~~The~~ system according to claim ~~1~~12, wherein the second optical surface (7) ~~is provided with~~ has deposited a hydrophilic layer (11) on a surface of the second optical surface remote from the focused radiation beam that has a thickness substantially equal to $0.25 \lambda/n$.

4. (Currently amended) A-~~The~~ system according to claim ~~1~~12, wherein the optical head (3) further comprises a magnetic coil (4) ~~arranged at a side of the optical head (3)~~ closest to the recording stack (9) such that an optical axis of the optical head (3) ~~traverses the center of the magnetic coil (4) and the recording stack (9) of the optical data storage medium (5)~~ is of the magneto-optical type.

5. (Currently amended) A-~~The~~ system according to claim 4, wherein the magnetic coil (4) has an inner diameter smaller than $60 \mu\text{m}$.

6. (Currently amended) ~~A~~The system according to any one of claims ~~1-5~~12 and 2-5, wherein the hydrophobic layer (~~10, 11~~) comprises a material selected from the group of poly-para-xylylenes, fluorocarbons and copolymers ~~thereof~~of fluorocarbons.

7. (Currently amended) ~~A~~The system according to any one of claims ~~4-6~~4-5, ~~wherein the~~
focused radiation beam has a wavelength λ , wherein the transparent hydrophobic layer has a
refractive index n , and wherein the magnetic coil (4) is contained in a partially transparent slider,
that is adapted for flying at a distance of $>0.5 \lambda/n$ and $<2 \mu m$ from the first optical surface (~~6~~).

8. (Currently amended) An optical data storage medium (~~5~~)—having a recording stack—(~~9~~),
formed on a substrate—(~~8~~), said recording stack suitable for recording by means of a focused radiation
beam—(~~1~~), with a wavelength λ in air, the recording stack having a first optical surface most remote
from the substrate, ~~characterized in that the first optical surface (6) is provided with~~ having deposited
thereon a transparent hydrophobic layer (~~10~~) that has a refractive index n and has a thickness smaller
than $0.5 \lambda/n$.

9. (Currently amended) ~~An~~The optical data storage medium according to claim 8, wherein the
first ~~optical surface is provided with a~~ hydrophobic layer (~~10~~) that has a thickness smaller than 0.25
 λ/n .

10. (Currently amended) ~~An~~The optical data storage medium (~~5~~)—according to claim 8 or 9,

wherein the hydrophobic layer comprises a material selected from the group of poly-para-xylenes, fluorocarbons and copolymers ~~thereof~~ fluorocarbons.

11. (Canceled)

12. (New) An optical recording and reading system, the system comprising:

a laser configured to provide a focused radiation beam;

an optical data storage medium comprising:

a substrate, and

a recording stack formed on the substrate having a first optical surface remote from the substrate, wherein the recording stack is configured for recording by the focused radiation beam; and

an optical head, with an objective arranged on a recording stack side of the optical data storage medium and having a second optical surface closest to the recording stack, from which objective the focused radiation beam emanates during recording, wherein at least one of the first optical surface has deposited a transparent hydrophobic layer on a surface of the first optical surface remote from the recording stack or the second optical surface has deposited a transparent hydrophobic layer on a surface of the second optical surface remote from the focused radiation beam.

13. (New) The system according to claim 12, wherein the objective is adapted for recording/reading at a free working distance from the first optical surface smaller than 50 μm .

14. (New) A method of manufacturing an optical data storage medium, the method comprising acts of:

providing a substrate;

depositing a recording stack on the substrate, wherein the recording stack is suitable for recording by a focused radiation beam with a wavelength λ in air,

depositing a transparent hydrophobic layer on an optical surface of the recording stack most remote from the substrate, wherein the hydrophobic layer has a refractive index n and has a thickness smaller than $0.5 \lambda/n$.